



Cooperative Emerald Ash Borer Project

Emerald Ash Borer

Agrilus planipennis Fairmaire

- U.S. Department of Agriculture
 - Animal and Plant Health Inspection Service
 - Forest Service
- Michigan Department of Agriculture
- Michigan Department of Natural Resources
- Michigan State University

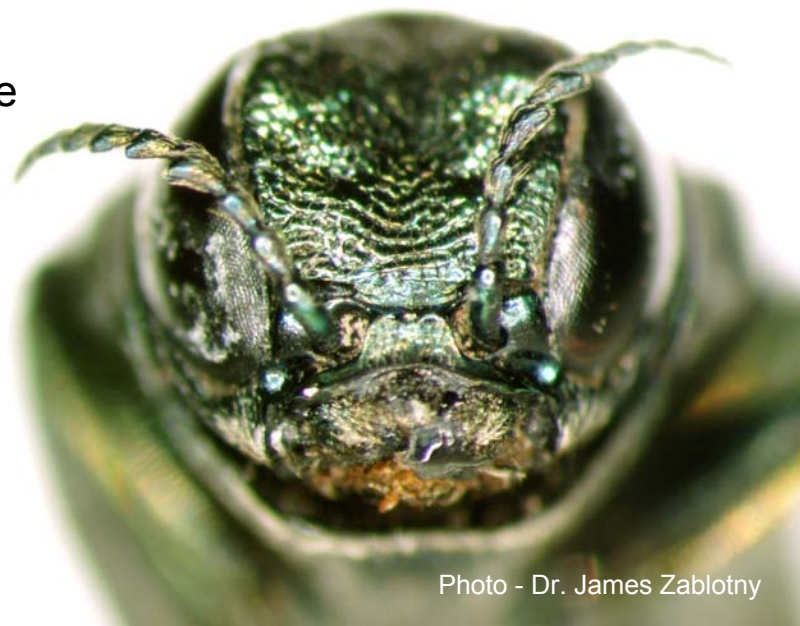


Photo - Dr. James Zablotny

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Discovery and Response...

A new invasive species

- June of 2002
 - a new exotic beetle from Asia was discovered feeding on ash (*Fraxinus* spp.) trees in southeastern Michigan.
 - Specimens were collected and submitted for identification to Michigan State University (MSU).
- July 2002 –
 - Specimen was confirmed by USDA as:
***Agrilus planipennis* Fairmaire**
(Emerald Ash Borer (EAB))



Photo - Dr. James Zablotny

Discovery and Response...

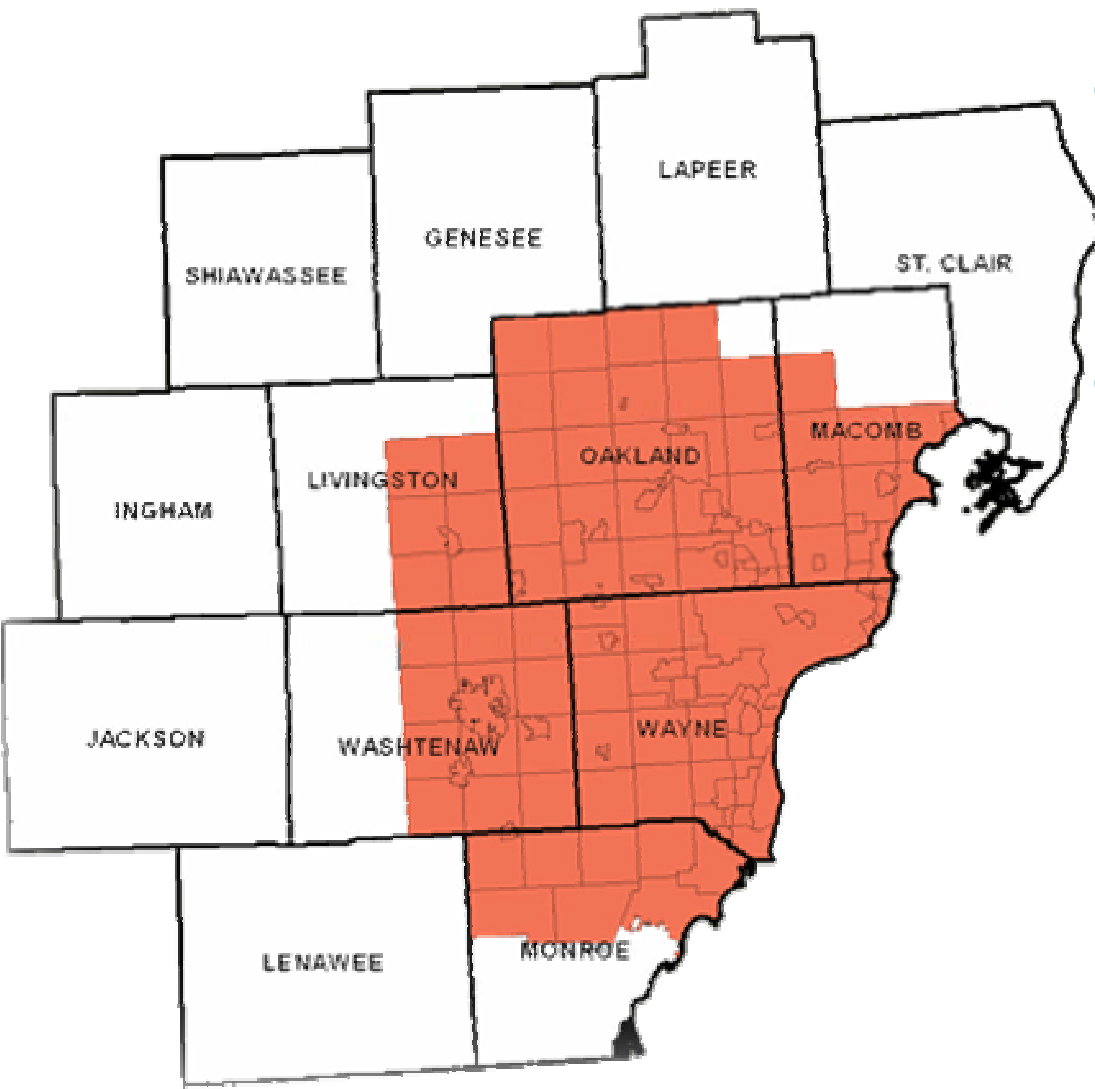
A new invasive species

- EAB Larvae feed in the phloem and outer sapwood, producing galleries that eventually girdle and kill branches and entire trees.



Discovery and Response...

Location - MI

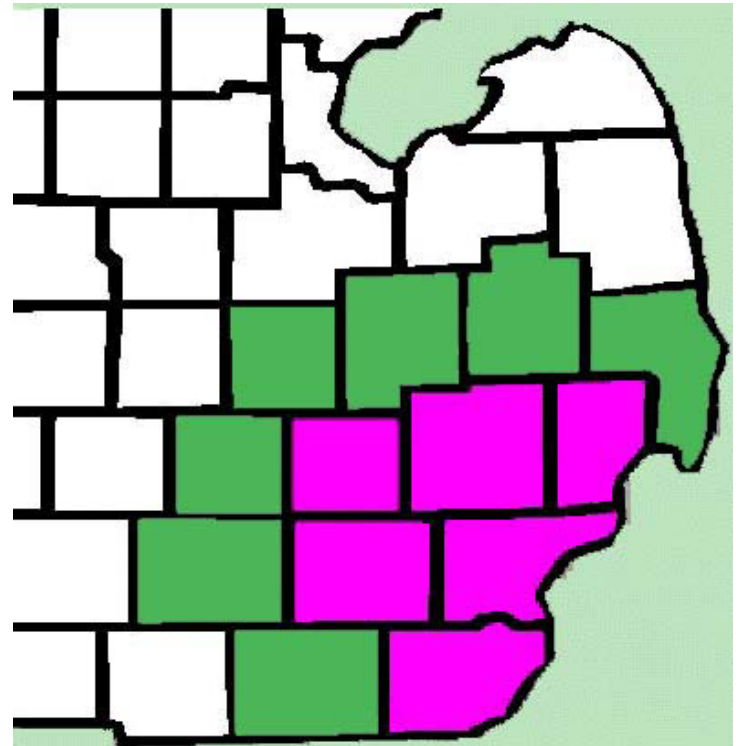


- Delimiting surveys originally find the insect in 6 counties (Livingston, Oakland, Macomb, Washtenaw, Wayne, Monroe).
- 2002/3 Infestation represents 2473 sq. miles
 - 650,000 landscape trees
 - 50% in decline
 - 10,631,333 forest trees
 - 50% in decline

Discovery and Response...

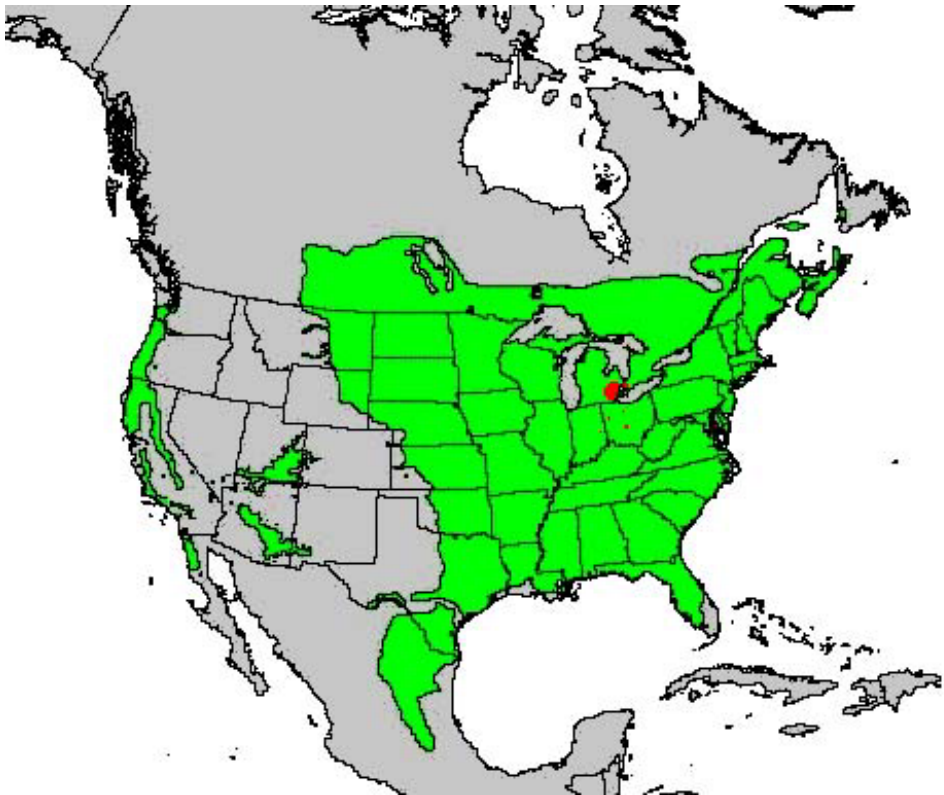
Impact - MI

- EAB has already killed millions of ash trees (landscape and forest) in Michigan and threatens the remaining Michigan ash resource, approximately 700 million ash trees.
- \$\$ Millions in losses to Michigan's nursery industry.
- Extreme costs to remove and dispose of infested trees.
- Un-measurable social and economic losses to families and communities.



Discovery and Response...

Impact – The Big Picture



- Ash resources of other states, the country, and North America.
- Removal of ash from the ecosystem.
- Up to 2% of the country's total leaf area.
- \$50-60 billion in ash related economic losses nationwide.

Discovery and Response...

Since July 2002...

- July 2002 –
 - MDA implements an internal quarantine, initially five (5) counties, but revises it in September of 2002 to include Monroe County, bringing the total to six (6) counties.
- August 2002 – April 2003
 - Canada announces EAB infestation in Windsor, Ontario and begin parallel actions to Michigan.
 - Delimitation surveys continue and give approximation of infested area and possible length of infestation.
 - Science Advisory Panel (SAP) is formed to recommend a plan of action (APHIS, MDA, Forest Service, Canadians).
 - SAP – Zones; Core, suppression, fire break, survey



Photo - Dr. James Zablotny

Discovery and Response...

Since July 2002...

- August 2002 – April 2003
 - City and county Gov't awake to the financial implications of thousands of dead ash trees along their streets.
 - Press releases, media events begin.
 - Web sites and hot lines are established.
 - Federal Politicians start to take notice.
 - Marshalling yards are established.
 - Disposal programs begin.
 - Detailed work plan incorporating Science Panel strategy is developed (Survey, Regulatory, Control, PR, Data Mgmt, Structure and Staff).
 - State and Federal roles are agreed upon.



Discovery and Response...

Since July 2002...

- August 2002 – April 2003
 - Cost estimates to implement the plan are made.
 - Research (methods) needs are categorized and prioritized (Researchers are identified).
 - The work plan and request for funding are taken to Washington.
- May 2003 – July 2003
 - Program Implementation
 - Infrastructure – facilities, vehicles
 - Recruitment/Hiring/Training
 - Plan activities begin.





Discovery and Response...

So, where are we now...

- Presently, EAB is established or found in 13 counties (Livingston, Oakland, Macomb, Washtenaw, Wayne, Monroe, St Clair, Lapeer, Genesee, Shiawassee, Ingham, Jackson, Lenawee).
- MDA expanded their Internal Quarantine to include 7 additional counties.
- Federal Quarantine is established October 8th 2003 which basically mirrors the state quarantine.



Discovery and Response...

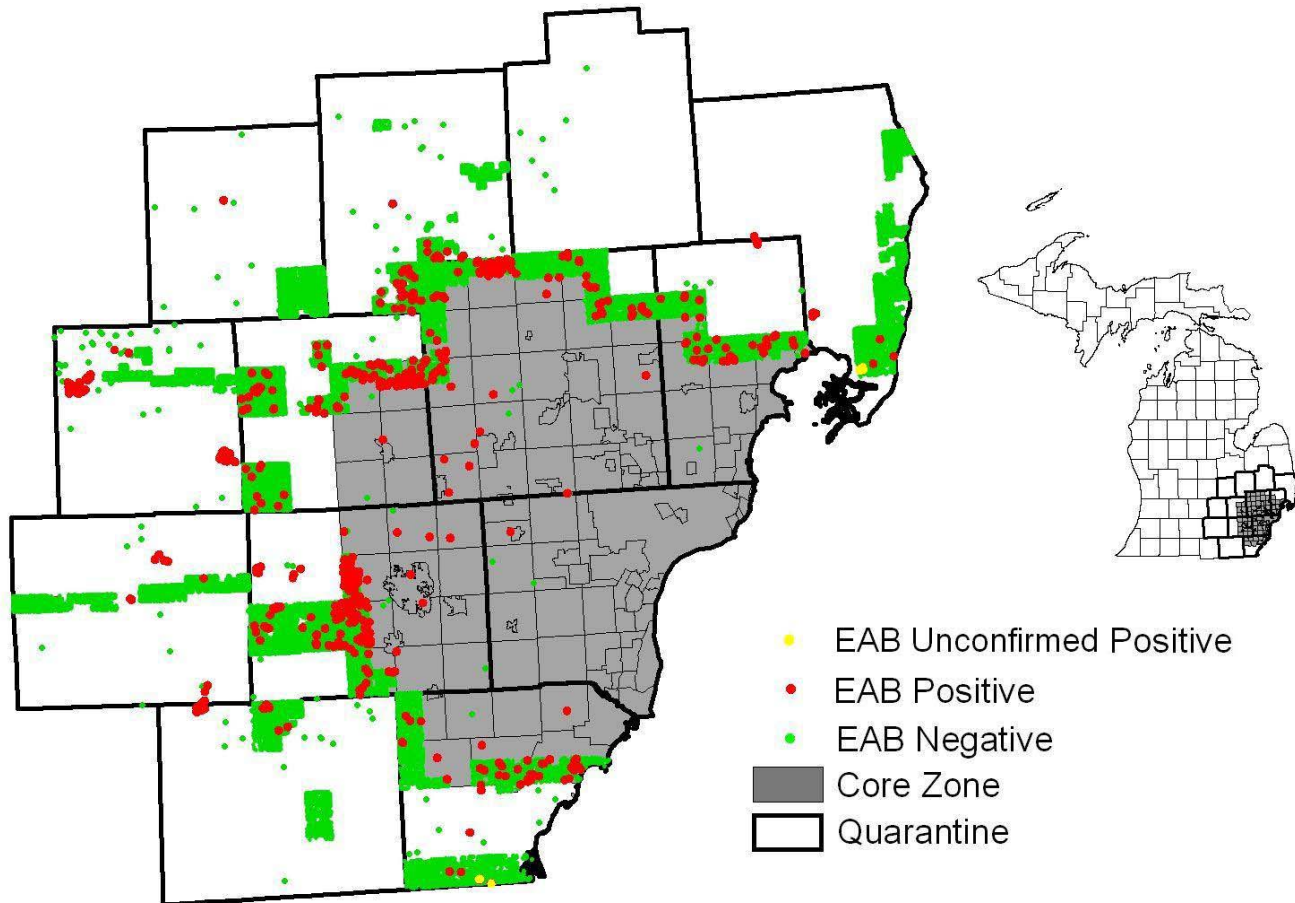
So, where are we now...

- Thirteen quarantined counties regulated for:
 - Emerald Ash Borer
 - Entire ash trees
 - Ash limbs, branches, cut firewood (ANY TYPE)
 - Logs or untreated ash lumber with bark
 - Ash chips or other ash products
 - Any article presenting risk of spread

Discovery and Response...

So, where are we now...

2003 Emerald Ash Borer Survey Program in Southeast Michigan
November 23, 2003





Discovery and Response...

So, where are we now...

EAB Survey Accomplishments from July 14 to November 13, 2003

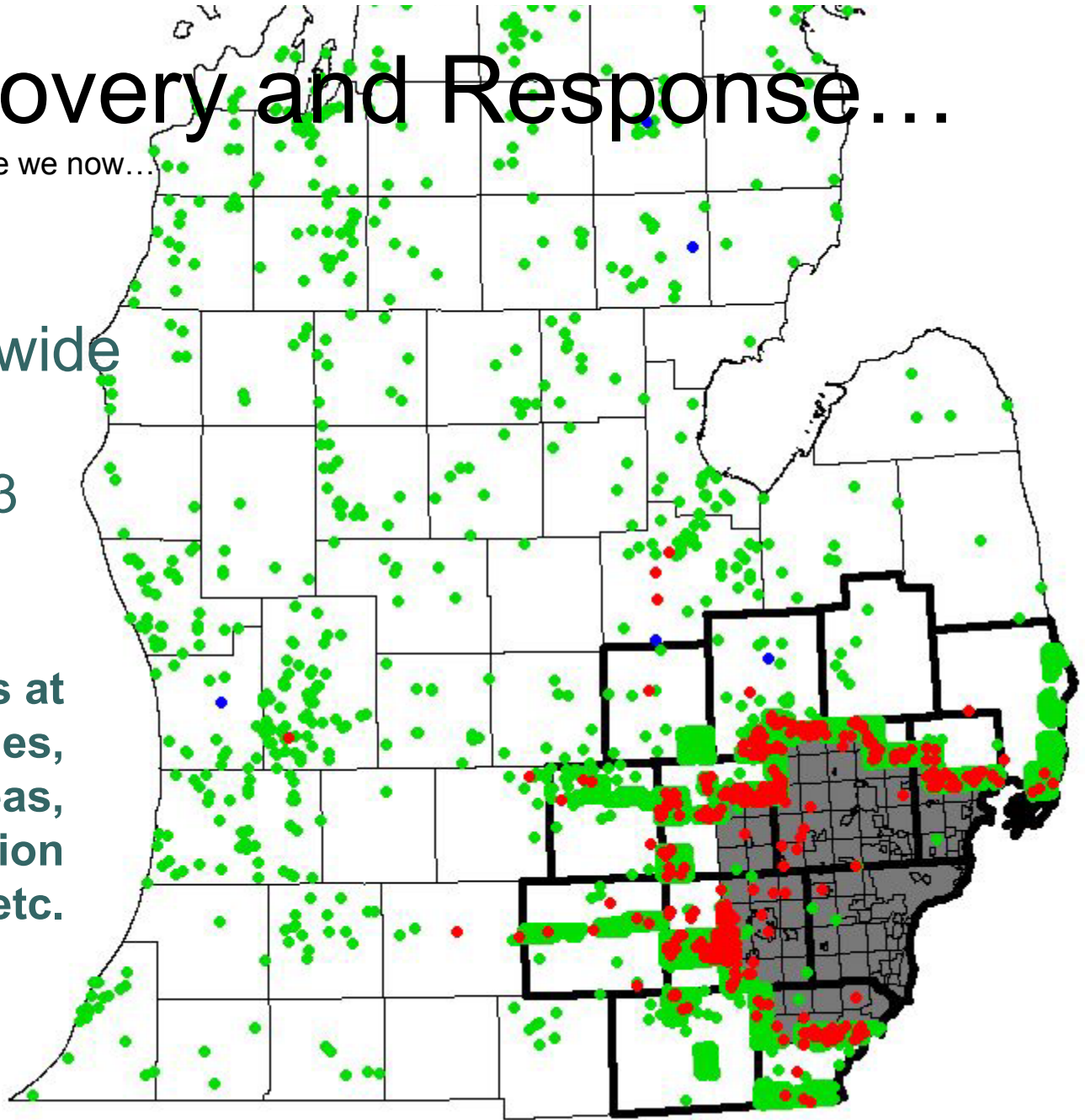
- Southeast Michigan surveys performed
 - 37,661 survey sites
 - 180,000 trees surveyed
 - 483,000 acres surveyed
 - 755 square miles
- Emerald Ash Borer Hotline
 - Approximately 1,500 calls received
 - Four resulted in detection of outlier

Discovery and Response...

So, where are we now...

2003 EAB Statewide
Survey Program
November 13, 2003

Over 1,138 surveys at
sawmills, nurseries,
rest areas,
new construction
sites, etc.





Discovery and Response...

Continuing Actions

- Survey: define leading edge for management decisions
- Control strategies for outliers: develop/implement
- Regulatory: maintain quarantine compliance
- Research: biology, controls, traps, hosts and more
- Outreach: firewood inspections, signage, web site